

Plumas National Forest
FEATHER RIVER RANGER DISTRICT

Biological Evaluation

April 30, 2019



PROJECT NAME: Concow Fire Salvage Project

PROJECT ACRES: 176

ELEVATION: 2,800 to 3,395 Ft.

LOCATION MAP: Figure 1

IMPLEMENTATION: Summer 2019

SUMMARY

Species Determination: fire salvage activities will not affect species discussed in this document.

Species occurring in the vicinity:

- Foothill yellow-legged frog (*Rana boylei*)
- California spotted owl (*Stix occidentalis occidentalis*)
- Northern goshawk (*Accipiter gentiles*)

Salvage does not occur within California spotted owl or Northern goshawk designated protected areas and salvage is not permitted within waterways.

Protection measures:

- For the Northern goshawk, activities will not occur between February 15 through September 15 on the haul route that passes through the center of a goshawk protected activity center (PAC), on Road 23N14Y. Refer to Figure 2.
- Foothill Yellow-legged frog
To protect Foothill Yellow-legged frogs, maintenance activities (e.g., hand-cut and pile < 10" trees, prescribed burn) are excluded between October 15 through May 1 or until the end of the rainy season. Work may subsequently resume when rain stops and after a dry period of 48 hours or and no further precipitation is forecast during the time to complete the project.
- Heavy equipment is restricted from use within a 100-feet from perennial or intermittent creeks and 25-feet from ephemeral seasonal creeks. Maintenance activities may occur within the buffer.

INTRODUCTION

As part of the Campfire restoration efforts, the Feather River Ranger District (FRRD) on the Plumas National Forest (PNF) is proposing fire salvage on 176 acres in the Concow area. This project includes the identification and removal of hazard trees with an approximate volume of 600 million board feet (MBF). The Campfire began about 6:29 a.m., Thursday, November 8, 2018, off Pulga road and Camp Creek Road in Butte County. The fire burned 153,336 acres through November 25, when it was 100 percent contained. Of the fire burned acres 32, 313 are on Forest Service land.

DESCRIPTION OF THE PURPOSE AND NEED

Purpose and need

Areas between and along Concow Road and Rim Road were burned severely in the Campfire. Tree mortality occurred in areas of light, moderate, high and mixed fire severity. The Forest service proposes to log the trees that have died, will die and were skinned up severely in dozer line operations. Salvage is largely along roadsides and a section along a powerline. These dead and dying trees and structurally damaged live trees present an imminent safety hazard and risk to forest visitors, neighboring landowners and their homes and facilities.

Proposed Action

The proposed area is of mixed conifer species: ponderosa pine, white fir, incense cedar, and sugar pine. Douglas-fir, madrone, tan-oak, and black-oak. Conventional or mechanical tractor logging practices will be used to salvage trees in the early summer of 2019. Re-entry may occur within the project foot print for up to 3 years in order to remove trees in the future deemed dangerous to the public.

Approximately 2-3 years after salvage a combination of natural regeneration and plantings would be used to achieve desired stocking levels of new stands dominated by shade-intolerant fire-resilient species (such as ponderosa pine, Douglas-fir, black oak, and sugar pine).

Reforestation prep activities include: site preparation which can include biomass, hand-cutting, hand or grapple piling and pile burning. Post planting can include grubbing, mastication, hand-cut or grapple pile, pile burning, prescribed fire and or targeted grazing.

Management Direction

The National Forest Management Act January 2004, Sierra Nevada Forest Plan Amendment record of decision provides for ecosystem restoration following catastrophic disturbance events through the salvage harvest of dead and dying trees conducted to recover the economic value of this material and to support objectives for reducing hazardous fuels, improving forest health, reintroducing fire, and/or re-establishing forested conditions.

Appendix D of the 2004 SNFPA Record of Decision (ROD) provides management direction in terms of standards and guidelines for fire salvage. In addition, Appendix A of Volume 1 of the 2004 SNFPA Final Supplemental Environmental Impact Statement (pgs. 354-357) provides additional direction.

There is no set diameter limit within the 2004 SNFPA ROD for trees with 100 percent mortality or snag removal for salvage. There are general guidelines that recommend maintaining a minimum amount of snags across the landscape (USDA 2004b, pg. 69). In addition the 2004 SNFPA ROD states "...generally do not conduct salvage harvest in at least 10 percent of the total area affected by fire." (USDA 2004 b, pg. 52). The 2004 SNFPA ROD also states that outside of Wildland Urban Interface (WUI) defense zones, that "...salvage harvest are prohibited in PACs and known den sites unless a biological evaluation determines that the areas proposed for harvest are rendered unsuitable for the purpose they were intended by a catastrophic stand-replacing event." (USDA 2004b, pg. 53).

Species Protection Measures

Northern goshawk

To protect the goshawk during its courtship and nesting period, the hauling of timber is excluded between February 15 and September 15 on the portion of a haul route on road 23N14Y that goes through the center of the a protected goshawk nesting area. Refer to Figure 2 for the location of the protected activity center and road.

Foothill Yellow-legged frog

To protect the Foothill Yellow-legged frog activities are excluded between October 15 through May 1 or until the end of the rainy season. Work may subsequently resume when rain stops and after a dry period of 48 hours or and no further precipitation is forecast during the time to complete the project.

Stream Protect Measures

Riparian conservation area widths were adjusted at the project level and are site-specific.

- Heavy equipment is restricted from use within a 100-foot from perennial or intermittent streams and 25-feet from ephemeral.
- Maintenance activities (e.g., hand-cut and pile < 10" trees, prescribed burns) are allowed within a 100-foot stream buffer (perennial or intermittent) and 25-feet ephemeral creeks.

EXISTING ENVIRONMENT AND EFFECTS

Analysis Area

Due to the extreme fire behavior in the surrounding location the 176-acre salvage units, is the analysis area.

Field Reconnaissance

The location of the salvage and surround area had been surveyed under the Flea Project in 2005 and 2006. Due to the Butte Lightning Complex (BLC) fire of 2008, the Flea Project was preempted by the Concow Hazardous Fuel Reduction Project. The Campfire burned over areas of the BLC fire, which had also exhibited extreme fire behavior resulting in high vegetative and tree mortality. California spotted owl nesting habitat was completely lost due to the BLC fire in the Concow area. The Campfire in the French Creek area impacted portions not entire areas of nesting and foraging owl and goshawk habitat.

Survey Information

Project implementation is scheduled for end of May or early June 2019 in order to remove salvable timber. Rain and snow conditions, primarily rain, have made surveys unworkable within the Campfire perimeter. The intensity of the fire was severe, we used ground truthing, fire model intensity GIS and satellite imagery to locate suitable habitat for species, but it does not exist within the Concow area. Follow-up wildlife and aquatic surveys will occur summer 2019, but will focus on areas where suitable habitat remains.

Historical data shows that a goshawk nest with fledglings was found in 2006. A recent visual cursorially survey without an auditory call occurred in April 2019 and no goshawk(s) were detected. Auditory and intensive surveys were not done because protocol level surveys require they begin in June. Assuming presences, a limiting operating period (LOP) is in place for the haul route through the goshawk protected habitat. The LOP could be lifted should surveys confirm the birds are not nesting this year.

Stream surveys occurred for the Flea Project and found Foothill yellow-legged frogs (FYLF) throughout Concow. However, none of streams where FYLFs occurred will be affected by the salvage.

DETERMINATION OF EFFECTS

Wildlife suffered a substantial losses due to habitat alteration and destruction from the wildfire. Animals in the path of the fire were either killed or displaced. Displaced wildlife will head toward areas not affected by the fire. It is my determination that listed Forest Service Sensitive Species, Management Indicator Species, and Migratory bird species will not be affected by the removal of fire affected trees during salvage activities. Refer to Appendix A, B, and C for a species lists.

Biological Evaluation was prepared by Jo Anna Arroyo, wildlife biologist.
Feather River Ranger District, Oroville California.

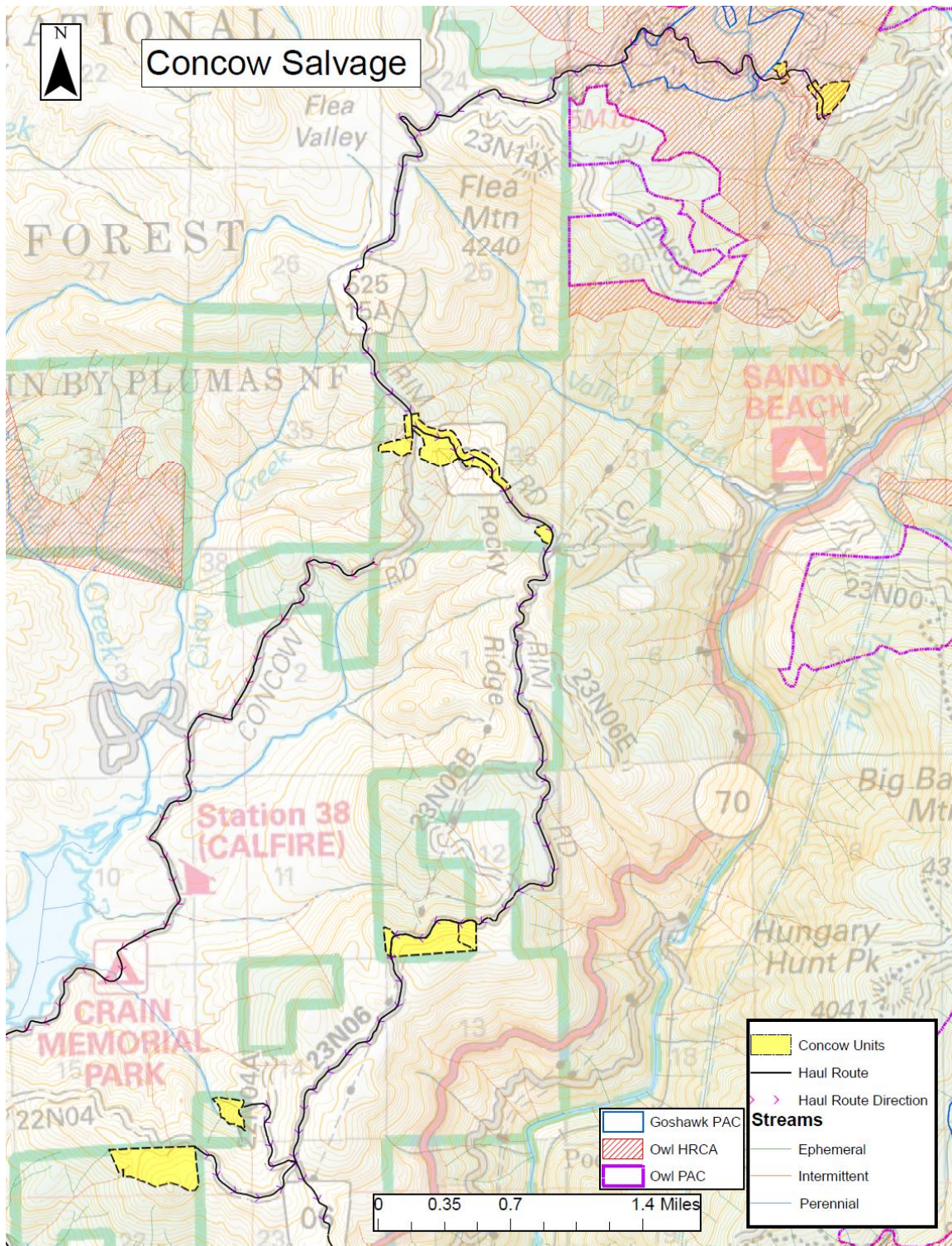


Figure 1. Concow fire salvage units.

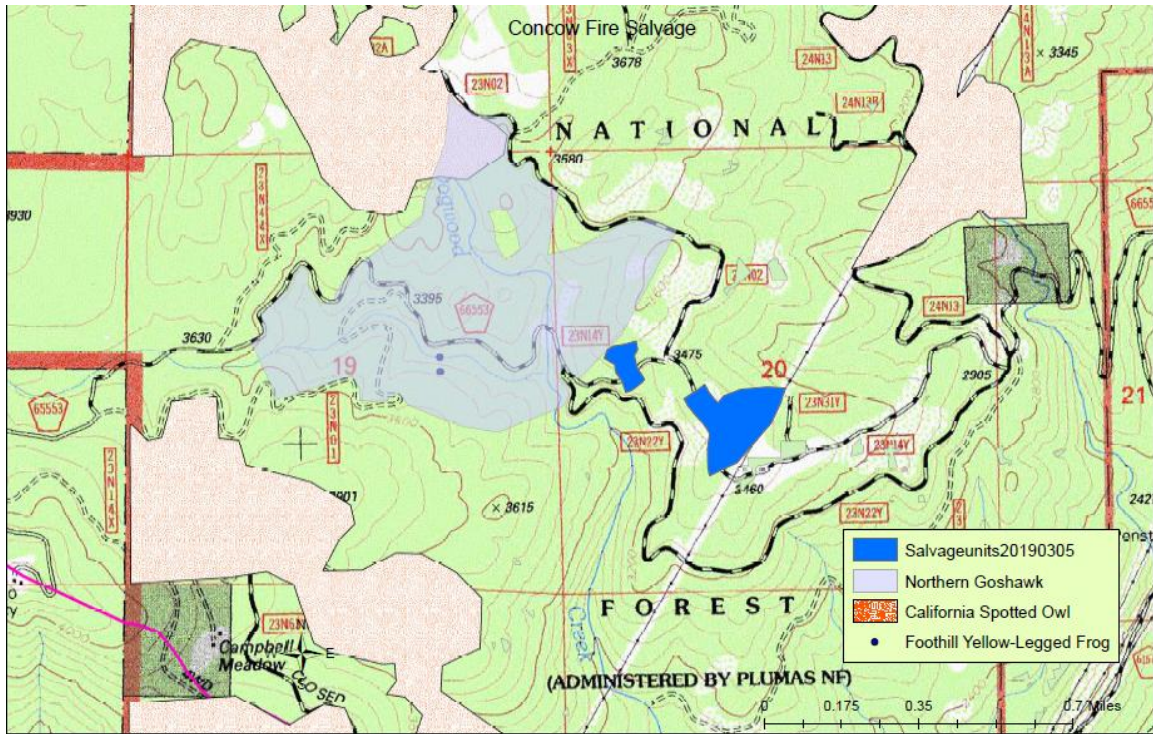


Figure 2. Limit hauling operations on road 23N14Y through goshawk protect habitat February 15 through September 15.

APPENDIX A

Threatened, Endangered, Proposed, Candidate and Sensitive Animal Species that potentially occur on the Plumas National Forest and determinations

Threatened, Endangered and Sensitive Species (Scientific Name)	Species Status*	Habitat or Ecosystem Component	Category for Project Analysis**	Determinations
Invertebrates				
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	FT	Elderberry trees (<i>Sambucus</i> spp.)	1	WNA
Fish				
Hardhead minnow (<i>Mylopharodon conocephalus</i>)	USFS : S	Riverine and Lacustrine	1	WNA
Amphibians				
California red-legged frog (<i>Rana aurora draytonii</i>)	FT	Riverine and Lacustrine	1	WNA
Foothill yellow-legged frog (<i>Rana boylei</i>)	USFS : S, DFG : SSC	Riverine and Lacustrine	1	WNA
Sierra (Mountain) yellow-legged frog (<i>Rana sierrae</i>)	FE, USFS : S, DFG : SSC	Riverine and Lacustrine	1	WNA
Northern leopard frog (<i>Rana pipiens</i>)	USFS : S, DFG : SSC	Riverine and Lacustrine	1	WNA
Reptiles				
Northwestern pond turtle (<i>Clemmys marmorata marmorata</i>)	USFS : S, DFG : SSC	Riverine and Lacustrine	1	WNA
Birds				
Bald eagle (<i>Haliaeetus leucocephalus</i>)	USFS : S, SE, USFWS : BCC	Large trees adjacent to riverine and lacustrine	1	WNA
California spotted owl (<i>Strix occidentalis occidentalis</i>)	USFS : S, USFS : MIS, DFG : SSC, USFWS : BCC	Late Seral Closed Canopy Coniferous Forest	1	WNA
Greater sandhill crane (<i>Grus canadensis tabida</i>)	USFS : S, ST	Prefers open habitats (grasslands and croplands) with shallow lakes and fresh emergent wetlands	1	WNA
Great gray owl (<i>Strix nebulosa</i>)	USFS : S, SE	Late Seral Closed Canopy Coniferous Forest adjacent to wet meadows	1	WNA
Northern goshawk (<i>Accipiter gentilis</i>)	USFS : S, DFG : SSC	Late Seral Closed Canopy Coniferous Forest	1	WNA
Swainson's hawk (<i>Buteo swainsoni</i>)	USFS : S, DFG : SSC	Open desert, grassland or cropland containing scattered, large trees or small groves	1	WNA

Threatened, Endangered and Sensitive Species (Scientific Name)	Species Status*	Habitat or Ecosystem Component	Category for Project Analysis**	Determinations
Willow flycatcher (<i>Empidonax traillii brewsteri</i>)	USFS : S, SE, USFWS : BCC	Riparian with dense willows	1	WNA
Mammals				
American marten (<i>Martes americana</i>)	USFS : S	Late Seral Closed Canopy Coniferous Forest	1	WNA
California wolverine (<i>Gulo gulo luteus</i>)	USFS : S, ST	Late Seral Closed Canopy Coniferous Forest	1	WNA
Pacific fisher (<i>Martes pennanti pacifica</i>)	FC, USFS : S, DFG : SSC	Late Seral Closed Canopy Coniferous Forest	1	WNA
Pallid bat (<i>Antrozous pallidus</i>)	USFS : S, DFG : SSC	Most common in open, dry habitats with rocky areas (rocky outcrops, cliffs and crevices)	1	WNA
Sierra Nevada red fox (<i>Vulpes vulpes necator</i>)	USFS : S, ST	Late Seral Closed Canopy Coniferous Forest	1	WNA
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	USFS : S, DFG : SSC	Mesic Habitats	1	WNA
Fringe-tailed myotis (<i>Myotis thysanotis</i>)	USFS-S	Sangs, caves, mines, crevices in rocks. Nearby water. Oaks and pinyon woodlands	1	WNA
Invertebrates				
Bumble bee (<i>Bombus occidentalis</i>)	USFS-S	Its short proboscis limits flower species with short corolla lengths	1	WNA

*Species Status: FE = Federal Endangered, FT = Federal Threatened, FP = Federal Proposed, FC = Federal Candidate,

USFS: S = U.S. Forest Service - Sensitive, USFS: MIS = U.S. Forest Service – Management Indicator Species, SE = State Endangered,

ST = State Threatened, DFG: FP = State Fully Protected, DFG: SSC = State Species of Special Concern,

USFWS: BCC = U. S. Fish and Wildlife Service Birds of Conservation Concern, SOI = Species of Interest.

** Category 1: Species whose habitat is not in or adjacent to the wildlife analysis area and would not be affected by the project.

Category 2: Species whose habitat is in or adjacent to the wildlife analysis area, but would not be either directly or indirectly affected by the project.

Category 3: Species whose habitat would be either directly or indirectly affected by the project.

*Determinations: T, E & P Species: WNA = Will Not Affect, MAINLA = May Affect but Is Not Likely to Adversely Affect Individuals or their designated critical habitat, MAILAA = May Affect and Is Likely to Adversely Affect Individuals or their designated critical habitat.

FS Sensitive Species: WNA = Will Not Affect, MAI = May Affect Individuals, but is not likely to result in a trend toward Federal listing or loss of viability, MAILRTFL = May Affect Individuals, and is Likely to Result in a Trend toward Federal Listing or loss of viability.

APPENDIX B

Selection of MIS for Project-Level Habitat Analysis

Habitat or Ecosystem Component	CWHR Type(s) defining the habitat or ecosystem component*	Sierra Nevada Forests Management Indicator Species (Scientific Name)	Species Status**	Category for Project Analysis ***
Early Seral Coniferous Forest	Douglas-fir (DFR), Eastside Pine (EPN), Jeffrey Pine (JPN), Lodgepole Pine (LPN), Ponderosa Pine (PPN), Red Fir (RFR), Sierran Mixed Conifer (SMC), Subalpine Conifer (SCN), White Fir (WFR), tree sizes 1, 2, & 3, all canopy closures	Mountain quail (<i>Oreortyx pictus</i>)	USFS : MIS	1
Mid Seral Coniferous Forest	Douglas-fir (DFR), Eastside Pine (EPN), Jeffrey Pine (JPN), Lodgepole Pine (LPN), Ponderosa Pine (PPN), Red Fir (RFR), Sierran Mixed Conifer (SMC), Subalpine Conifer (SCN), White Fir (WFR), tree size 4, all canopy closures	Mountain quail (<i>Oreortyx pictus</i>)	USFS : MIS	1
Late Seral Open Canopy Coniferous Forest	Douglas-fir (DFR), Eastside Pine (EPN), Jeffrey Pine (JPN), Lodgepole Pine (LPN), Ponderosa Pine (PPN), Red Fir (RFR), Sierran Mixed Conifer (SMC), Subalpine Conifer (SCN), White Fir (WFR), tree size 5, canopy closures S and P	Sooty grouse (<i>Dendragapus obscurus</i>)	USFS : MIS	1
Late Seral Closed Canopy Coniferous Forest	Douglas-fir (DFR), Eastside Pine (EPN), Jeffrey Pine (JPN), Lodgepole Pine (LPN), Ponderosa Pine (PPN), Red Fir (RFR), Sierran Mixed Conifer (SMC), Subalpine Conifer (SCN), White Fir (WFR), tree size 5 (canopy closures M and D), and tree size 6.	California spotted owl (<i>Strix occidentalis occidentalis</i>)	USFS : S, USFS : MIS, DFG : SSC, USFWS : BCC	1
		Northern flying squirrel (<i>Glaucomys sabrinus</i>)	USFS : MIS	
Oak-associated Hardwood & Hardwood/conifer	Montane Hardwood (MHW), Montane Hardwood-Conifer (MHC)	Mule deer (<i>Odocoileus hemionus</i>)	USFS : MIS	1
Riparian	Montane Riparian (MRI), Valley Foothill Riparian (VRI)	Yellow warbler (<i>Dendroica petechia</i>)	USFS : MIS, DFG : SSC	1
Riverine & Lacustrine	Riverine (RIV), Lacustrine (LAC)	Aquatic macroinvertebrates	USFS : MIS	1

Habitat or Ecosystem Component	CWHR Type(s) defining the habitat or ecosystem component*	Sierra Nevada Forests Management Indicator Species (Scientific Name)	Species Status**	Category for Project Analysis ***
Shrubland (west-slope chaparral types)	Montane Chaparral (MCP), Mixed Chaparral (MCH), Chamise-Redshank Chaparral (CRC)	Fox sparrow (<i>Passerella iliaca</i>)	USFS : MIS	1
Snags in Burned Forest	Medium and large snags in burned forest (stand-replacing fire)	Black-backed woodpecker (<i>Picoides arcticus</i>)	USFS : MIS	1
Snags in Green Forest	Medium and large snags in green forest	Hairy woodpecker (<i>Picoides villosus</i>)	USFS : MIS	1
Wet Meadow	Wet Meadow (WTM), Freshwater Emergent Wetland (FEW)	Pacific chorus frog (<i>Pseudacris regilla</i>)	USFS : MIS	1

*All CWHR size classes and canopy closures are included unless otherwise specified; dbh = diameter at breast height;

1 = Seedling Tree <1" dbh, **2** = Sapling Tree 1 - 6" dbh, **3** = Pole Tree 6 - 11" dbh, **4** = Small Tree 11 - 24" dbh, **5** = Medium/Large Tree >24" dbh, **6** = Multi-layered Tree. **D** = Dense Canopy Cover (> 60%), **M** = Moderate Canopy Cover (40 - 59%), **P** = Open Canopy Cover (25 - 39%), **S** = Sparse Canopy Cover (10 - 24%) (Mayer and Laudenslayer 1988).

****Species Status:** **FE** = Federal Endangered, **FT** = Federal Threatened, **FP** = Federal Proposed, **FC** = Federal Candidate,

USFS: S = U.S. Forest Service - Sensitive, **USFS: MIS** = U.S. Forest Service – Management Indicator Species, **SE** = State Endangered,

ST = State Threatened, **DFG: FP** = State Fully Protected, **DFG: SSC** = State Species of Special Concern,

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APPENDIX C

Analysis of Migratory Birds

Birds of Conservation Concern (Sierra Nevada - BCR 15) Species (Scientific Name)	Species Status*	Forest Service Sensitive Species (S) or Management Indicator Species (MIS)	Project Level Report (BA/BE or MIS)	Critical Habitat component or threat as defined by Sierra Nevada Bird Conservation Plan (PIF)	Category for Project Analysis**
American peregrine falcon (<i>Falco peregrinus anatum</i>)	SE, USFWS : BCC	See Below	N/A	Bodies of water in open areas with protected cliffs, canyons and ledges for cover and nesting	1
Bald eagle (<i>Haliaeetus leucocephalus</i>)	USFS : S, SE, USFWS : BCC	Bald Eagle (S)	BA/BE	Designated as a non-land bird by DeSante	1
Black swift (<i>Cypseloides niger</i>)	USFWS : BCC	See Below	N/A	Wet cliff, waterfalls	1
California spotted owl (<i>Strix occidentalis occidentalis</i>)	USFS : S, USFS : MIS, DFG : SSC, USFWS : BCC	California Spotted Owl (S)	BA/BE	Depends critically on old growth	1
Calliope Hummingbird (<i>Stellula calliope</i>)	USFWS : BCC	Sooty (Blue) Grouse (MIS) Yellow Warbler (MIS) Willow Flycatcher (S)	MIS MIS BA/BE	Open Forested habitats, and moist habitats on the East Slope	1
Cassin's Finch (<i>Carpodacus cassinii</i>)	USFWS : BCC	California Spotted Owl (S)	BA/BE	Depends critically on old growth	1
Flammulated Owl (<i>Otis flammeolus</i>)	USFWS : BCC	Mule Deer (MIS) Hairy Woodpecker (MIS)	MIS MIS	Depends critically on oaks or oak woodlands, Loss of snags	1
Lewis' woodpecker (<i>Melanerpes lewis</i>)	USFWS : BCC	Hairy Woodpecker (MIS)	MIS	Loss of snags	1
Olive-sided flycatcher (<i>Contopus cooperi</i>)	DFG : SSC, USFWS : BCC	California Spotted Owl (S) Hairy Woodpecker (MIS)	BA/BE MIS	Utilize late successional/old growth forest, but does not depend on it critically, Loss of snags	1
Williamson's sapsucker (<i>Sphyrapicus thyroideus</i>)	USFWS : BCC	Hairy Woodpecker (MIS)	MIS	Loss of snags	1
Willow flycatcher (<i>Empidonax traillii brewsteri</i>)	USFS : S, SE, USFWS : BCC	Willow Flycatcher (S)	BA/BE	Depends critically on montane meadow habitat	1

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